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REMARKS

In response to the final Office Action dated July 26, 2005, claims 1, 14, 22, and 26 have been amended. Therefore, claims 1-7 and 9-32 remain in the case. The Applicants respectfully request that this amendment be entered under 37 C.F.R. 1.116 to place the above-referenced application in condition for allowance or, alternatively, in better condition for appeal. Reexamination and reconsideration of the amended application are requested.

Section 103(a) Rejections

The final Office Action rejected claims 1-7 and 9-32 under 35 U.S.C. § 103(a) as being unpatentable over Bayer et al. (U.S. Patent No. 6,311,190) in view of Oracle 8i. Oracle 8i is described in two papers: "Programming Environments for Oracle Objects", pp. 1-18 (hereinafter referred to as Reference A, and "Programmatic Environments", pp. 1-27 (hereinafter referred to as Reference B).

The Office Action stated that Bayer et al. disclose all elements of the Applicants' claimed invention except that Bayer et al. do "not teach high density voting over a computer network using an object residing on a server that maintains persistent connections between the object and a database; caching the votes received in a memory cache using the object; using the cached votes in calculating a result." However, the Office Action stated that "the concept of using objects in a memory cache to provide a buffer to enable high performance access to a database is a well-known concept, as evidenced by Oracle 8i." Therefore, the Office Action asserted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bayer and Oracle 8i to arrive at the Applicants' claimed invention.

In response, the Applicants respectfully traverse these rejections based on the claims amendments to claims 1, 14, 22, and 26, and the following legal and technical analysis. It is the Applicants' position that the combination of Bayer et al. and the Oracle 8i papers (References A & B) is lacking at least one material element of the Applicants' claimed invention. In particular, the combination does not disclose, either explicitly or implicitly, the following material claimed feature of tabulating in memory

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cached votes to generate <u>intermediate voting results at specified intervals</u> and writing the intermediate voting results to a database <u>at the specified intervals</u> to determine a final voting result.

Further, the combination of Bayer et al. and the Oracle 8i papers fails to appreciate the advantages of this claimed feature. Thus, the Applicants submit that the combination of Bayer et al. and the Oracle 8i papers cannot make obvious this claimed feature of the Applicants' invention.

To make a prima facie showing of obviousness, all of the claimed features of an Applicant's invention must be considered, especially when they are missing from the prior art. If a claimed feature is not disclosed in the prior art and has advantages not appreciated by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, as stated in the MPEP, if a prior art reference does not disclose, suggest or provide any motivation for at least one claimed feature of an Applicants' invention, then a prima facie case of obviousness has not been established (MPEP § 2142).

Amended Independent Claims 1, 14, 22 and 26

Amended independent claim 1 of the Applicants' claimed invention includes a method for facilitating interactive voting over a computer network whereby voters use the computer network to transmit votes to a server in response to a survey question. The method includes receiving votes at the server in response to the survey question, providing a Live Event Object residing on the server that maintains persistent connections between the Live Event Object and a database, and caching the votes received in a memory cache using the Live Event Object. The method also includes tabulating in memory the cached votes to generate intermediate voting results at specified intervals, writing the intermediate voting results to the database at the predefined intervals and

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computing a final voting result to the survey question by tallying each of the intermediate voting results written in the database.

Amended independent claim 14 of the Applicants' claimed invention includes an interactive voting system using a computer network. The system includes a server in communication with the computer network for receiving voting data from voters in response to a polling question presented to the voters. The system also includes an object residing in memory on the server for caching at least some of the voting data and tabulating the cached voting data for a predefined time interval to compute an intermediate voting result, wherein the object is a non-relational object. The system further includes a database having a connection with the object that receives and writes the cached voting data at the predefined time interval.

Amended independent claim 22 of the Applicants' claimed invention includes an interactive voting system that uses a computer network to process voting data. The system includes a Live Event Vote Server in communication with the computer network, a Live Event Object residing in memory on a Live Event Vote Server. The Live Event Object receives and caches voting data from a client in communication with the computer network, tabulating the cached voting data at a predefined time interval to generate intermediate voting results, and transferring the intermediate voting results at the predefined time interval to a Live Event Database through persistent connections between the Live Event Object and the Live Event Database such that the intermediate voting results are used to compute final voting results in real-time.

Amended independent claim 26 of the Applicants' claimed invention includes in a computer network having a plurality of clients and a server, a computer-implemented method for providing interactive voting over a computer network. The method includes transmitting voting data from the plurality of clients to the server, and providing an object resident in memory on the server that contains procedures and instructions for manipulating the voting data. The method also includes tabulating in memory cached voting data to generate intermediate voting results at specified intervals, and writing the

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intermediate voting results to a database writing the intermediate voting results to a database <u>at the specified intervals</u>. The method further includes establishing and maintaining a persistent connection between the object and the database to facilitate writing of the intermediate voting results, and using the intermediate voting results in the database to tabulate a final voting result.

The Live Event Object (LEO) caches in memory the votes received from a large number of voters (specification, page 5, line 34 to page 6, line 1). At predefined intervals, these votes are tallied in memory to generate intermediate voting results (specification, page 6, lines 1-2). The intermediate voting results then are written to the database at the predefined time intervals (specification, page 12, lines 23-24). Final voting results are generated from the intermediate voting results written in the database (specification, page 6, lines 2-3). The "data aggregation" (of summing up the votes to generate intermediate voting results) is performed in memory instead of hitting the database for every vote. Thus, in order to speed up system throughput, the Applicants' claimed invention aggregates votes in memory, maintains persistent connections with the database, and writes intermediate voting results to the database. Moreover, the objects in memory are not relational objects.

In contrast, Bayer et al. merely disclose a way for users to view previous survey questions that are stored in a database. In particular, a "voter may optionally select to view any of the results of previous surveys that were offered as part of the current voting campaign" (col. 17, lines 63-65). In other words, Bayer et al. allows a user to view results of prior surveys, while in contrast the Applicants' claimed invention sums cached votes in the memory and at certain time intervals send these results to be written at the database. Nowhere is the Applicants' claimed features of tabulating in memory cached votes to generate intermediate voting results at specified intervals and writing the intermediate voting results to a database at the specified intervals to determine a final voting result discussed or suggested.

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The Oracle 8i papers, namely, Reference A and Reference B, add nothing to the cited combination that would render the Applicants' claimed invention obvious. Reference A and B merely discuss accessing and storing data in a database. In particular, these papers discuss caching objects for effective program interface purposes. However, the Applicants' claimed features of tabulating in memory cached votes to generate intermediate voting results at specified intervals and writing the intermediate voting results to a database at the specified intervals to determine a final voting result is not discussed or suggested.

Consequently, no motivation or suggestion for the claimed features of the Applicants' invention is provided. Absent this teaching, motivation or suggestion, the combination of Bayer et al. and References A and B cannot render the Applicants' claimed invention obvious (MPEP § 2143.01).

The combination fails to appreciate or recognize the advantages of the Applicants' claimed feature of tabulating in memory cached votes to generate intermediate voting results at specified intervals and writing the intermediate voting results to a database at the specified intervals to determine a final voting result. More specifically, vote caching and tabulating the cached votes in memory at a predefined time interval allow "intermediate voting results to be tabulated continuously to generate final voting results much faster than can be obtained by tabulating each vote individually" (specification, page 6, lines 3-5). Moreover, "unlike previous interactive voting techniques that tabulate results after all the votes have been received, the present invention computes intermediate voting results at specified intervals to enable rapid and real-time tabulation of final voting results" (specification, page 6, lines 5-9). Neither Bayer et al., Reference A, nor Reference B discuss or appreciate these advantages of the Applicants' claimed feature.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Bayer et al., Reference A, and Reference B, fails to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of tabulating in

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memory cached votes to generate intermediate voting results at specified intervals and writing the intermediate voting results to a database to determine a final voting result. In addition to explicitly lacking this feature, the combination of Bayer et al., Reference A, and Reference B also fails to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination of Bayer et al., Reference A, and Reference B fails to appreciate advantages of this claimed feature.

Therefore, as set forth in *In re Fine* and MPEP § 2142, the combination of Bayer et al., Reference A, and Reference B does not render the Applicants' claimed invention obvious because the references are missing at least one material feature of the Applicants' claimed invention. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. <u>ACS Hospital Systems, Inc. v. Montefiore Hospital</u>, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that independent claims 1, 14, 22 and 26 are patentable under 35 U.S.C. § 103(a) over Bayer et al. in view of Oracle 8i (References A and B) based on the amendments to claims 1, 14, 22, and 26 and the legal and technical arguments set forth above. Moreover, claims 2-7 and 9-13 depend from amended independent claim 1, claims 15-21 depend from amended independent claim 14, claims 23-25 depend from amended independent claim 22, and claims 27 and 29 depend from amended independent claim 26 and are also nonobvious over Bayer et al. in view Oracle 8i (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-7 and 9-28.

Conclusion

Because the Applicants' claimed invention includes features neither taught, disclosed nor suggested by the art cited in the Office Action, the Applicants respectfully submit that the rejections of claims 1-7 and 9-28 has been overcome.

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The Applicants, therefore, submit that claims 1-7 and 9-28 of the subject application are in condition for immediate allowance. The Examiner, therefore, is respectfully requested to withdraw the outstanding rejections of the claims and to pass all of the claims of this application to issue.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

> Respectfully submitted, Dated: August 31, 2005

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